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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,189	01/05/2004	Richard Cottrell	0235-0002.02	2617

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EXAMINER

O'CONNOR, CARY E

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/752,189	COTTRELL, RICHARD	
	Examiner	Art Unit	
	Cary E. O'Connor	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 64-125 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 64-76 is/are allowed.
- 6) ☒ Claim(s) 77-125 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 124 and 125 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as originally filed, does not provide support for an abutment having a "shoulder end" and a "tip end".

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 77 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,672,872 in view of Elian (6,854,972). The patented claim does not include the limitation that the upper portion includes a circumferentially textured surface. Elian shows a dental implant 10a with a contoured coronal end. The upper portion 12 includes a circumferentially textured surface 12a. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the upper portion of the patent claim with a circumferentially textured surface as taught by Elian, to improve bone integration with the implant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 77, 78, 101-103, 113 is rejected under 35 U.S.C. 102(b) as being anticipated by Elian et al (6,854,972). Elian shows a dental implant 10a comprising a longitudinal body having an outer surface, an apical end on a lower portion and a coronal end on an upper portion and a buccal side. The upper portion 12 includes a

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circumferentially textured surface 12a. The body has a height along the outer surface such that the height is greatest on the lingual side and least on the buccal side (see Figure 4b). As to claim 78, the body is substantially circular (see Figure 6f). Claims 124 and 125 are rejected under 35 U.S.C. 102(e) as being anticipated by Abarno (2003/0031982). Abarno shows an abutment 100 comprising a longitudinal body having a tip end and an opposite shoulder end, a lingual side and a buccal side. The abutment includes a shoulder portion having a sloped contour wherein the shoulder portion is configured such that a distance of the lingual side from the tip end to the shoulder portion is shorter than the distance on the buccal side. The abutment further includes a fastener FA.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 79-86, 104-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elian (6,854,972) in view of Hansson (6,547,564). Elian does not disclose that the texturing comprises circumferential micro-threads. The implant of Hansson includes circumferential microthreads in the coronal section 19. The implant also includes macro-threads 21. This makes the implant stiffer to enable the implant to transfer loads more evenly to the surrounding bone and helps alleviate the problems of

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bone resorption. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the texturing of Eliau with the micro-threads of Hansson, in order to alleviate the problems of bone resorption. As to claim 82, note that the micro-threads of Hansson comprise a plurality of micro-threads (column 6, lines 22-40). As to claim 84, note that the macro-threads of Hansson are deeper than the micro-threads (column 6, lines 41-50). As to claim 86, note the connection feature 30 of Eliau.

Claims 86, 87 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eliau (6,854,972) in view of Hansson (6,547,564) as applied to claims 77 and 111 above, and further in view of Morgan et al (2003/00228555). The connection feature of Eliau is not formed as a female cone. Morgan shows an abutment comprising a male cone 10c that mates with a female cone in the coronal end of the implant (paragraph 0020) to form a locking taper connection between the implant and the abutment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the connection feature of Eliau with the locking taper configuration, as taught by Morgan, because it would provide a secure connection between the abutment and the implant that wouldn't require an extra component (screw) to connect the abutment and implant. Furthermore, this arrangement would enable the practitioner to rotationally adjust, infinitely, the abutment relative to the implant.

Claims 89-91, 114-117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eliau (6,854,972) in view of Morgan et al (2003/00228555). The connection feature of Eliau is not formed as a female cone. Morgan shows an abutment comprising a male cone 10c that mates with a female cone in the coronal end of the

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implant (paragraph 0020) to form a locking taper connection between the implant and the abutment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the connection feature of Eliau with the locking taper configuration, as taught by Morgan, because it would provide a secure connection between the abutment and the implant that wouldn't require an extra component (screw) to connect the abutment and implant. Furthermore, this arrangement would enable the practitioner to rotationally adjust, infinitely, the abutment relative to the implant.

Claims 92-100, 118-123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eliau (6,854,972) in view of Morgan et al (2003/00228555) as applied to claim 91 above, and further in view of Hansson (6,547,564). Eliau does not disclose that the texturing comprises circumferential micro-threads. The implant of Hansson includes circumferential microthreads in the coronal section 19. The implant also includes macro-threads 21. This makes the implant stiffer to enable the implant to transfer loads more evenly to the surrounding bone and helps alleviate the problems of bone resorption. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the texturing of Eliau with the micro-threads of Hansson, in order to alleviate the problems of bone resorption. As to claim 94, note that the micro-threads of Hansson comprise a plurality of micro-threads (column 6, lines 22-40). As to claims 95-97, note that the macro-threads of Hansson are deeper than the micro-threads (column 6, lines 41-50).

Allowable Subject Matter

Claims 64-76 are allowed.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 57 (Figure 6). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

Applicant's arguments with respect to claims 77 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-2724964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cary E. O'Connor
Primary Examiner
Art Unit 3732

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